



INSTALLATION OF "SEPAR 2000" WATER SEPARATION AND FUEL FILTER

The Separ 2000 must be installed on the suction side of the fuel system.

The Separ 2000 should be installed in an easily accessible place in the fuel system (suction side). All other filters on the suction side should be removed.

The filter can be installed either higher or lower than the tank. For best results, arrange for the filter inlet to be level with the top of the tank.

In cases where the filter is at a lower level, a shut-off valve must be installed; otherwise fuel will flow out when the filter lid is opened.

After installing the Separ 2000, fill up the filter with fuel to avoid running the delivery pump without fuel.

Finally, test the filter and joints for leaks.

REPLACING THE FILTER ELEMENT

Note: Before changing filter, backflush the filter element

1. Turn off the engine
2. Loosen the lid screws
3. Remove the lid
4. Take out the spring frame
5. Take out the filter element
6. Replace the element
7. Put the spring frame on top of the element
8. Check the lid gasket (if necessary, replace) then correctly seat the gasket and lid
9. Screw the lid tightly on
10. Check for correct positioning of the lid
11. Start the engine again

FUEL FLOW

Fuel is sucked into the filter by the action of the lift pump via either port A or B.

- Plug off the port that is not being used
- Filter is designed for the suction side of the engine

Stage 1

Fuel enters through port A or B where it will then enter the centrifuge, separating larger particles of dirt and droplets of water down to 30 microns. The centrifuge does not spin. The filter spins the fuel in a circular motion as it passes through the channels of the centrifuge.

Stage 2

As the fuel comes out of the centrifuge it will then hit the side of the bowl allowing the dirt and water to settle to the bottom of the bowl.

Stage 3

The fuel flows through the second centrifuge stage and passes on the outside of the centrifuge.



At this point the small droplets of water and dirt particles are thrown to the center of the bowl, moving around and forming larger droplets of water. There the larger vane will catch the particles and bring them down through the vane. This produced by the vacuum on the lowest part of the second vane.

Stage 4

With the continuous circular motion of the fuel, the dirt and water droplets continue to grow together; becoming heavier and falling back into the bowl again.

Stage 5

Specially treated water resistant paper will filter out all remaining dirt and water.

FILTER ELEMENTS

- Available in 2,0 or a 30 micron rating
- Filters can be cleaned - please see backflushing procedures

Fuel then leaves the filter through port C or D. Plug off the port that is not being used or a vacuum gauge kit is available for installation from Separ Filters.

BACKFLUSHING

Backflushing is required when dirt and water block the filter element. The following signs will indicate this:

- Loss of engine power
- Black smoke may exhaust from the engine
- Vacuum gauge will indicate a high restriction reading on the element of the filter.

BACKFLUSHING PROCEDURES

12. Stop the engine or switch over to the spare filter on the switchable units
13. Open the bleed screw
 - This introduces atmospheric pressure into the filter
 - The dirt particles and larger droplets of water will release from the bottom of the filter element
 - Gravity will assist the dirt particles as they slowly fall to the bottom of the bowl
14. Open the drain valve (PUSH IN AND TURN)
 - The clean fuel above the filter will backflush through the filter element. This will release the smaller dirt and water particles.
 - Drain the fuel until the dirt and water are removed from the filter and the bowl.
15. Close the drain valve
16. Close the bleed screw (DO NOT OVER TIGHTEN)
17. You can now start your engine or switch back to the clean filter
18. If the engine still lacks power, try backflushing the filter again
19. If restriction is still too high, change the filter element.